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THE COMMERCIAL KING AND TANNER CRAB FISHERIES IN THE ALEUTIAN
ISLANDS MANAGEMENT AREAS

A REPORT TO THE ALASKA BOARD OF FISHERIES

By

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DUTCH HARBOR BROWN KING CRAB

Introduction

Dutch Harbor Statistical Area O has as its northern boundary the latitude of Cape Sarichef (54° 36' North latitude), as its eastern boundary the longitude of Scotch Cap Light (164° 44' West longitude), and as its western boundary 171° West longitude (Figure 1).

Historic Background

Brown (or golden) king crab, *Lithodes aequispinus*, in the Dutch Harbor area were historically taken incidental to the red king crab fishery. Catches of brown king crab were small, and landings of red king crab included some brown king crab prior to the 1981/82 season. The poundage was not recorded separately.

During the 1981/82 season, six vessels landed over 115,000 pounds of brown king crab during the red king crab season (Table 1). Only one landing occurred during 1982 before the season closed January 15 (Table 2) concurrent with the area red king crab closure.

Interest in the fishery grew and during the 1982/83 season 49 vessels landed over 1.1 million pounds in the area's first directed brown king crab fishery. As red king crab stocks declined, effort and interest in brown king crab continued into the 1983/84 season, when 1.8 million pounds were landed by 47 vessels (Table 1).

In 1984 the Board of Fisheries adopted staff proposals to lower the brown king crab size limit from 6.5 inches to 6.0 inches, and established the area as a permit fishery to allow the fishery to expand into other areas outside the historical fishing grounds. During the 1984/85 permit season, prices and effort dropped. Thirteen vessels landed 1.5 million pounds of brown king crab. Since implementation of the permit system the catch has averaged over 1.6 million pounds per year. All landings were taken from historical grounds developed during the 1982/83 season. During the 1988 Spring shellfish meetings the Board of Fisheries adopted a staff proposal removing the permit fishery designation and set a season opening date of September 1.

While the number of vessels participating in this fishery has remained somewhat consistent, the total number of pot pulls increased dramatically in 1994. During the 1993/94 fishery a total of 22,490 pots were pulled compared to 67,537 in the 1994 fishery (Tables 1 and 2). As a result, the season length went from 212 days in 1993/94 to 57 days in a season which opened on September 1 and closed on October 28, 1994 (Table 2).

Yearly survey data for Dutch Harbor brown king crab is not available. Brown king crab, along with other deep water species, do not lend themselves to standard trawl survey techniques. Also, catcher-processors (which are required to carry observers in all king and Tanner crab

fisheries statewide) seldom participate in this fishery. The above, coupled with intensified fishing effort in the area, prompted the Board of Fisheries to provide regulations requiring 100% observer coverage on all vessels in the Dutch Harbor brown king crab fishery. The regulations went into effect September 1 with the opening of the 1995 season.

1995 Fishery

The 1995 Dutch Harbor brown king crab fishery opened by regulation on September 1. A total of 17 vessels obtained observers and participated. This was comparable to the 14 vessels which participated during the 1994 season.

A total of 1,993,980 pounds were landed in 42 deliveries during the 1995 season which closed by emergency order on October 9, 1995. This total exceeded the intended harvest level of 1.6 million pounds, the average historical harvest of the directed fishery. At 38 days, the 1995 season was the shortest on record (Table 2). Fishery performance for the 1995 season was six crab per pot, identical to the prior season but lower than any other year on record (Table 1).

Average weight for this season was once again 4.6 pounds, the same as last year's fishery, and was higher than the average weight per crab for the last five years but below the historic high of 5.5 pounds recorded for the 1983/84 fishery (Table 1). A total of 65,030 pots were pulled during the 1995 fishery, down slightly from the 67,537 pot pulls recorded in 1994 (Tables 1 and 2). The majority of the 1995 harvest occurred during September (Table 3) from the western half of the Management Area near Yunaska Island and Islands of the Four Mountains from the statistical areas between 695232 and 705233 (Table 4).

Exvessel value for the 1995 season was \$2.60 per pound, a dramatic decline from the \$4.00 paid in 1994, which was the highest on record. Total value of the 1995 Dutch Harbor brown king crab fishery was \$5.0 million, down from the \$6.9 million value of last season's fishery. Reductions in exvessel prices paid for Dutch Harbor brown king crab are likely a result of a surplus of Russian king crab currently on the market.

During the 1995 fishery onboard observers sampled the contents of 2,436 pots on catcher-only vessels and 76 pots on the one catcher-processor which participated in this year's fishery.

Stock Status

The brown (or golden) king crab fishery in the Aleutian Islands is the fourth largest shellfish fishery in Alaska. The federal Fishery Management Plan for the Aleutian brown king crab fishery requires that recruitment over-fishing not occur and that fishing mortality not exceed 0.3 (a 25% exploitation rate) annually. However, prior to 1991, no systematic survey of brown king crabs had been conducted in Alaska. The results from a study of a brown king crab survey initiated in 1991 was published in October 1994: Regional Information Report No. 4K94-35, Findings from the 1991 golden king crab survey in the Dutch Harbor and Adak

management areas including analysis of recovered tagged crabs. This report is available to the public from the Commercial Fisheries Management and Development Division, 211 Mission Road, Kodiak, AK 99615.

With implementation of 100% observer coverage, area specific information is now being collected on sex, size, number and distribution of the crab, and size, number and species composition of fish caught.

DUTCH HARBOR RED KING CRAB

Introduction

The Dutch Harbor area, or Statistical Area O, has as its northern boundary the latitude of Cape Sarichef ($54^{\circ}36'$) North latitude, its eastern boundary the longitude of Scotch Cap Light on Unimak Island at $164^{\circ}44'$ West longitude and its western boundary 171° West longitude (Figure 1).

Historic Background

The red king crab, *Paralithodes camtschatica*, fishery began in 1961 and rapidly became one of the State's major production areas. During the development years of the fishery, the catch peaked at an all time high of 32.9 million pounds during the 1966/67 season.

Since 1966/67 the fishery has fluctuated widely. A decline in harvest characterized the fishery between 1968 and 1970 (Table 5). After the low catch of 8.9 million pounds during the 1969/70 season, the fishery rebuilt to a peak of 15.9 million pounds during the 1975/76 season. The increase appeared to be largely a result of improved catches in the Egg Island District, and expansion into new grounds in the Western District.

For the second time in the history of the fishery, a sharp decline followed several years of increasing harvests, and the 1977/78 season marked a new low in the Area O fishery. The decline was area wide, and all districts suffered poor catches.

By 1980/81 catches had reached the highest level in 13 years, and although populations had rebuilt somewhat in several of the districts, the bulk of the increase was due to the exploitation of previously unfished populations in the Unalaska and Western Districts. During this fishery nearly 39 percent of the catch came from areas only lightly fished during the previous seasons. The Dutch Harbor area is further broken down into five districts (Figure 2). Declining red king crab stocks in the early 1980's resulted in a closure of the fishery in 1983. The red king crab fishery has remained closed since that time. Although red king crab was the primary target species, a brown king crab fishery has developed since the closure of the red king crab fishery and is now the focal point of the Dutch Harbor area king crab fishery.

1995/96 Fishery

Due to the low abundance of red king crab the fishery was not opened for the 1995/96 season.

Stock Status

The Alaska Department of Fish and Game conducted a trawl survey of the Dutch Harbor area during the summer of 1995, also recent trawl surveys were done in 1991 and 1994, all with an emphasis on areas where historically significant fisheries had occurred. The 1991 and 1994 surveys indicated that no significant improvement in these stocks had occurred since the 1984 pot survey. The results of the 1995 survey indicated further reductions in the stocks, as no red king crab were caught. Based on these results no recovery is expected in the near future.

DUTCH HARBOR SCARLET KING CRAB

Historic Background

Scarlet king crab, *Lithodes couesi*, are harvested under authority of a permit as authorized in 5AAC 35.082. Scarlet king crab in the Dutch Harbor area have been harvested incidental to brown king crab and to the *Chionoecetes tanneri* fishery. Information regarding vessel effort and number of landings have been below the minimum to allow public dissemination.

1995 Fishery

Three vessels registered to catch scarlet king crab in the Dutch Harbor area. They made seven landings for a total harvest of 13,871 pounds. The average weight was 2.2 pounds per crab with a catch rate (CPUE) of less than one crab per pot pull.

Stock Status

There are no population estimates made for Dutch Harbor *Lithodes couesi*. However, 100% observer coverage has provided information on the size, sex, and species composition of the retained and non-retained catch. This information will be analyzed and used to develop management measures for these deep water crab stocks.

ADAK BROWN KING CRAB

Introduction

Adak, Area R, has as its eastern boundary 171° West longitude, as its western boundary the U.S./Russian Convention Line of 1867, and as its northern boundary 55°30' North latitude (Figure 1).

Historic Background

The Adak brown king crab fishery began during the 1975/76 season when one vessel made one delivery containing this species. Occurring incidentally to the red king crab fishery, catches of brown king crab were low during the 1975/76 to 1980/81 seasons (Table 6).

Fishermen began to target on brown king crab for the first time during the 1981/82 season when 14 vessels made 76 landings totaling 1.2 million pounds (Table 6). When this fishery began, most of the catch came from the North Admia and Petrel Bank Districts. Recently the Western Aleutian District has become a significant producer as well (Figure 3). The other three districts in Area R produce much lower catches. This is due to the lack of large inter-island passes where brown king crab are most numerous. In July 1985, the minimum legal size was reduced from 6.5 to 6.0 inches in carapace width (Table 7).

1994/95 Fishery

The 1994/95 Adak brown king crab fishery opened on November 1, concurrent with red king and Tanner crab fisheries in that area. As a result of this anticipated increase in effort, vessels intending to fish in the Adak king crab fishery (brown and red) were required to pre-register with the Alaska Department of Fish and Game no later than 4:30 p.m. October 14, 1994.

A total of 88 vessels pre-registered to fish for Adak brown king crab. Of those, 27 catcher-only and 2 catcher-processor vessels received tank inspections and entered the fishery on November 1. Of the 29 vessels receiving tank inspections for Adak brown crab, 22 were also registered to participate in the Adak red king crab fishery. One floating processor registered and processed both red and brown king crab on the grounds during the season.

A total of 34 vessels registered to fish Adak brown king crab during the 1994/95 season, compared to 21 vessels registered for the prior year's fishery. A total of 247 landings were made in 1994/95 for a total harvest of 6.4 million pounds. This compares to 147 landings and a harvest of 4.6 million pounds recorded during the 1993/94 fishery (Table 6).

Average weight of crab harvested during the 1994/95 season was 4.1 pounds. This is similar to the 4.2 pound average seen in the 1993/94 fishery. For the second consecutive year there was a significant increase in the number of pots pulled; 165,503 in 1992/93, 212,164 in 1993/94, and 319,006 in 1994/95. Catch per pot during the 1994/95 season was at a record low of 5 crabs per pot (Table 6).

Average price paid for Adak brown king crab for the 1994/95 season was \$3.33 per pound. This is higher than the \$2.50 average price paid during the 1993/94 season. Total fishery value for the 1994/95 season was \$20.3 million, approximately \$10 million greater than the prior season (Table 8).

Although effort occurred throughout the entire registration area during the 1994/95 fishery (Table 9), the majority of the catch came from the Amukta and Seguam Pass areas in the eastern portion of the registration area. Additional harvest was reported from the western portion of the registration area around Petrel Bank, Semisopochnoi Island, the waters between Kiska and Attu Islands, and as far west as the Stalemate Bank northwest of Attu (Figure 3). The majority of effort for the 1994/95 season took place during April through August 15 (Table 10). Unlike previous years, a greater effort was seen throughout November to January than in previous years due to the closure of the Bristol Bay red king crab fishery that usually opens November 1.

1995/96 Fishery

The 1995/96 Adak brown king crab fishery opened on November 1. A total of 11 vessels obtained observers and received tank inspections. This fishery, which has a regulatory closure date of August 15, is open at this time. As of January 15, 1996 a total of 1.1 million pounds have been landed in 34 deliveries. Catches have averaged approximately six crab per pot, slightly higher than the five crab per pot average observed in the 1994/95 fishery (Table 6). Catches of brown king crab have been from 56 statistical areas (Table 11) between 171° West and 170° East longitude.

Harvest and vessel participation in this fishery was greatest during November (Table 12). Weekly observer and processor reports indicated most vessels ceased operation for the holiday season. All vessels in this fishery shifted to the snow crab fishery in the Bering Sea on January 15. A major shift of effort back to the Adak brown king crab fishery is expected at the close of the snow crab fishery. As of January 15, 1996 observers assigned to all vessels participating in this fishery examined the contents of approximately 4,000 pots directed at brown king crab.

Status of Stocks

No population estimates are available for this area as a result of the lack of stock assessment surveys. Management of this fishery is managed based on size, sex and season. The historical average harvest of this fishery is 1.6 million pounds.

Limited additional information has been collected through onboard fisheries observers required on all processing vessels in this area since 1988. However, the number of catcher processors participating in this fishery has steadily declined (Table 8). As a result of this reduction in the number of vessels carrying observers in recent years, and the corresponding decrease in biological information being collected from this area not regularly surveyed, the Board of Fisheries implemented regulation requiring observers on all vessels beginning with the November 1 start up of the 1995/96 Adak brown king crab fishery. Information on the size, sex and species composition of both the retained and non-retained catch will yield area-specific information which can be used to estimate population abundance and develop management strategies.

ADAK RED KING CRAB

Introduction

Adak, Area R, is comprised of all waters west of 171° West longitude, south of 55° 30' North latitude and east of the U.S. - Russian Convention Line of 1867 (Figure 1).

Historic Background

The Adak red king crab fishery began in 1961 when four vessels harvested two million pounds. As the fleet exploited previously unfished areas, catches increased rapidly to a peak of 21 million pounds by the 1964/65 season (Table 13). For a short time the expanding Dutch Harbor king crab fishery diverted effort, and Area R catches dropped to 6 million pounds by the 1966/67 season.

From 1967/68 to the 1972/73 seasons, catches were relatively stable at 14 million to 19 million pounds (Table 13). The large catches were maintained by several years of strong recruitment and by the exploitation of populations discovered east of Adak Island. In addition to the eastward exploration, some vessels moved into the waters of the Petrel Banks, Amchitka Islands and other westward islands creating the separate Western Aleutians, Area S, fishery in 1967/68. The catch in Area S was small, and in 1978 management was simplified as Area S was changed to the Petrel Bank and Western Aleutian Districts of Area R (Figure 3).

The harvest declined sharply after the 1972/73 season (Table 13). At the Alaska Board of Fisheries recommendation, the department closed the fishery prior to the 1976/77 season. Since that time indications of recovery have been slight. ADF&G surveys conducted in 1975, 1976, and 1977 concluded that several years of poor recruitment to legal size was the cause of the decline. A shell disease and an unusually high natural mortality in the North Amliia District was also blamed for the decreased populations.

The harvest guideline range for this fishery was set after the 1976/77 season at 0.5 to 3.0 million pounds. By regulation the season extends to February 15 unless closed earlier by emergency order. Three of the past 10 seasons have been closed prior to the February 15 regulatory closure (Table 14).

Historically the character of this fishery has been one of intermittent participation of low intensity. The majority of participants move into this fishery for short periods, normally prior to or following other major fisheries such as Bristol Bay red king crab or Bering Sea Tanner crab. Recently the catch came almost exclusively from the area around Semisopochnoi Island in the Petrel Banks District (Figure 3).

Onboard fisheries observers were required on processing vessels (catcher-processors and floating processors). Since imposition of these requirements in 1988, the number of processing vessels participating in this fishery has dropped from 11 vessels in 1988/89 to one vessel in the 1993/94 fishery (Table 14). As a result, very little information is available on fishery bycatch or in-season catch reports from the fishing grounds.

1994/95 Fishery

The Adak Area R red king crab fishery opened on November 1. The Adak brown king crab, Western Aleutians *Chionocetes bairdi* Tanner crab and the Bering Sea *C. bairdi* Tanner crab fisheries opened on November 1 also. The red king crab fishery in Bristol Bay, which normally opens on November 1, remained closed for the 1994 season due to insufficient female crab abundance. In the absence of a red king crab fishery in Bristol Bay and reductions in the amount of *C. bairdi* Tanner crab available for harvest in the Bering Sea, effort in the Adak king crab fisheries was expected to increase dramatically for the 1994/95 season.

As outlined in the section on Adak brown king crab, preseason registration for the Area R brown king crab fishery was required for the 1994/95 season due to anticipated high levels of participation. A total 93 vessels pre-registered to participate in the Adak red king crab fishery. Of these, 70 also pre-registered for the Adak brown king crab fishery. Pre-registration was required for all vessels intending to participate at any time throughout the course of either the red or brown king crab fishery. Consequently, many vessels which did not intend to fish for king crab in the Adak area until after the Bering Sea *C. bairdi* fishery, also pre-registered.

A total of 29 vessels, including two catcher-processors, received tank inspections for the red king crab fishery beginning 72 hours prior to the start of the fishery. Of these, 22 were also registered to harvest brown king crab. As in past years, tank inspections were available in Dutch Harbor only.

The department solicited volunteers for daily catch reporting in order to track in season harvest. This season's fishery was expected to progress quickly due to the relatively large number of participants. A total of 20 catcher vessels volunteered to report via single sideband radio or marine satellite (MARSAT) telex on a daily basis. In addition, the observers on board the two catcher-processors were required to report daily.

Fishery performance for the first two weeks of the 1994/95 season averaged less than 1 crab per pot. This compares to an average catch in excess of 16 crab per pot for the first two weeks of the 1992/93 and 1993/94 seasons. Based on continued poor fishery performance, the fishery was closed after less than four weeks on November 28. The 1994/95 season was the shortest on record; a duration of 27 days (Table 14).

Total harvest for the 1994/95 season was 196,967 pounds (Table 15), a dramatic decrease from the 698,077 pounds harvested during the 1993/94 season and well below the 1.5 million pound harvest guideline. A total of 20 vessels made 31 landings during the 1994/95 fishery, an

increase over the 21 landings made by the 12 vessels which participated in the 1993/94 fishery (Table 13).

Daily observer radio reports indicated performance of the 1994/95 fishery at critically low levels. However, due to limited and inconsistent daily catch reporting on the part of volunteer catcher vessels (less than 25% of volunteer vessels reported daily), information sufficient to fully assess the performance of the fishery was not available until the third week of the season. This information was obtained from daily reports from onboard observers and weekly processor catch reports.

The exvessel price of the 1994/95 fishery was \$5.50 per pound, up from the prior season value of \$3.87 per pound and the highest on record for Adak red king crab. Total value for the 1994/95 fishery was \$1.1 million dollars, approximately 41% of the value of the 1993/94 fishery (Table 14). The high exvessel price for the 1994/95 fishery is largely attributed to the absence of a red king crab fishery in Bristol Bay for the 1994/95 season.

Catches came exclusively from the Petrel Bank District around Semisopochnoi Island (Figure 3). Average weight of crab harvested during the 1994/95 fishery was 6.5 pounds; considerable higher than the prior season average of 5.8 pounds. The 1994/95 season average weight is the highest average weight since the 1984/85 season and may reflect a relative decline in recruit crab abundance (Table 13).

1995/96 Fishery

The 1995/96 Adak red king crab fishery opened on November 1. A total of 11 vessels obtained observers and received tank inspections. Four vessels delivered red king crab by the regulatory closure date of February 15. A total of 38,941 pounds were landed in 12 deliveries. Catches have averaged approximately three crab per pot, similar to the low catches observed in the 1994/95 season (Table 13). The harvest occurred primarily in November (Table 16). Crab were harvested from 19 statistical areas (Table 17) between 176° West and 170° East longitude. For the first time in several years less than half of the catch came from the Petrel Banks District.

Weekly observer reports indicate very little effort was directed at red king crab. All vessels registered for this fishery were also registered for, and targeting on, Adak brown king crab. Observers collected pot samples from 2,080 pots directed at red king crab and approximately 4,000 directed at brown king crab.

Stock Status

Adak red king crab stocks have not been surveyed since 1977. Compared to historic levels, the population appears to be severely depressed. Observer coverage on all processing vessels on the fishing grounds since 1988 has provided some biological information on these stocks. However, the number of observers onboard catcher-processors has declined since 1988

(Table 14). Consequently, in recent years little biological information has been available on Adak red king crab. Observer coverage on all vessels began in November 1995. This program has started yielding information necessary to properly assess and manage Adak red king crab.

ADAK SCARLET KING CRAB

Historic Background

Scarlet king crab, *Lithodes couesi*, have historically been landed from the Adak Management Area as bycatch in the brown king crab fishery. Scarlet king crab are harvested under authority of a special permit according to 5AAC 35.082. Information regarding vessel effort and the number of landings prior to 1994 were below the minimum to allow public dissemination.

1995 Fishery

A total of 12 vessels registered for *L. couesi* during the 1995 season. Five of the vessels also registered for *Chionecetes tanneri* and seven for brown king crab. Six vessels made 18 landings for a total harvest of 49,126 pounds. The average weight was 2.5 pounds with a catch rate (CPUE) of 1.2 crab per pot. Even though *L. couesi* were caught primarily as bycatch in both the *C. tanneri* and brown crab fisheries, one vessel targeted on this species for a short duration.

Stock Status

There are no population estimates made for Adak *Lithodes couesi*. However, observers have been required on all vessels targeting king crab and have collected information on size, sex and species composition of retained and non-retained catch. This information is being analyzed and will be used to develop management measures for these stocks.

EASTERN ALEUTIAN DISTRICT TANNER CRAB

Introduction

The Eastern Aleutian District for Tanner crab encompasses all waters of Statistical Area J between the longitude of Scotch Cap Light and 172° West longitude, and south of 54°36' North latitude (Figure 4). The Eastern Aleutian District is marginal habitat for Tanner crab (*Chionoecetes bairdi*), as evidenced by the presence of commercial quantities in only a few major bays and inlets. The fishery has been rather small, with seasonal catches of less than one million pounds except for the 1977/78 season which produced a record catch of 2.5 million pounds (Table 18). The fishery began in Akutan and Unalaska Bays but has since expanded to include all areas known to contain Tanner crab. In the 1994 fishery eight vessels made 120 landings for a total harvest of 166,545 pounds (Table 18).

1995 Fishery

There was no fishery for the 1995 season due to low abundance of *C. bairdi* Tanner crab.

Stock Status

Previous trawl surveys of the Eastern Aleutian District in 1990 and 1991 indicated a population level that could support a harvest in the 100,000 pound range. The Department conducted another survey of the district in 1994. This survey showed a 750% decline in the population of *C. bairdi* Tanner crab from levels observed during the prior survey. This dramatic decline in the population prompted an emergency closure for the 1995 season. Data collected from the 1995 survey indicate an increase in abundance over the 1994 survey, but below levels observed during the 1990 and 1991 surveys. An increase of juvenile males and immature females was observed in the 1995 survey compared to the previous year's survey. The abundance of legal males, however, has declined well below 1994 estimates.

EASTERN ALEUTIAN *CHIONOECETES TANNERI*

Historic Background

In the early 1980s *Chionoecetes tanneri* Tanner crab were occasionally landed in the Eastern Aleutian District incidental to the developing brown king crab fishery around the Dutch Harbor area. Prior to 1993 no steady market existed for *C. tanneri* and few, if any, were sold commercially.

During 1993, interest in *C. tanneri* increased and commercial landings were made from the Eastern Aleutian District. Fishing effort in this district was from July through December, and only one vessel participated during the entire season. In 1993, the department restricted the harvest to males five inches or greater in carapace width.

To collect biological information on *C. tanneri* crab the department implemented 100% observer coverage in 1994, as allowed by the permit provisions provided in 5 AAC 35.082. Effort in the fishery increased from one vessel in 1993 to three vessels in 1994 (Table 19). Vessels started fishing for *C. tanneri* in March after the closure of the *C. opilio* fishery and continued through December.

1995 Fishery

A total of seven vessels obtained observers and participated in a directed *C. tanneri* fishery in the Eastern Aleutian district in 1995. Landings totalled 850,427 pounds from 51 deliveries. Catch per pot pull (CPUE) for the *C. tanneri* fishery in this area was 6 crab with an average weight of 1.7 pounds per crab (Table 19). Average exvessel price was \$1.57 per pound for a fishery value of approximately \$1.3 million (Table 20). This compares to 1994 when 27 landings were made for a harvest of 759,239 pounds. During the 1994 season, CPUE was 11 crab per pot and the average weight of crab harvested was 1.8 pounds (Table 19).

Deliveries in 1995 averaged 16,675 pounds. In 1994 the average delivery was 28,120 pounds. Several deliveries of *C. tanneri* in 1995 occurred as bycatch in the Dutch Harbor brown king crab fishery and by vessels targeting on *C. angulatus*.

In 1995 vessels fished an average of 598 pots and made 75,259 pot pulls (Tables 19 and 20). Effort began in May and continued throughout the year. Vessels fished in nineteen statistical areas both north and south of Umnak and Unalaska Islands.

Status of Stocks

No stock assessment surveys are conducted for *C. tanneri* Tanner crab, and consequently no population estimates are available. Onboard observers have been required on all vessels targeting *C. tanneri*, beginning in 1994. This program has yielded information on size, sex and species composition of the non-retained catch necessary to manage these stocks.

EASTERN ALEUTIANS *CHIONEOCETES ANGULATUS*

Historic Background

Chioneocetes angulatus have been taken incidental to the *C. tanneri* fishery since 1993. Fishermen have reported catching this crab species in small amounts, but prior to the 1995 season it was not reported on fish tickets. Shellfish observers required on all deep water Tanner crab fisheries reported a small percentage of *C. angulatus* in 1994. *Chionoecetes angulatus* are harvested under provisions of a special permit authorized under 5AAC 35.082.

1995 Fishery

A total of seven vessels registered and obtained observers to fish for *C. angulatus* either as a bycatch in the Dutch Harbor brown king crab or the *C. tanneri* crab fishery, or as the target species in 1995. Less than three vessels reported any catch, therefore catch information is confidential.

Stock Status

No population estimates are available for *C. angulatus*. Onboard observers have been required on all vessels targeting on *C. angulatus* and *C. tanneri* and have collected information on size, sex and species composition of the retained and non-retained catch. This information will be used to develop management measures for these stocks.

WESTERN ALEUTIAN DISTRICT TANNER CRAB

Introduction

The Western Aleutian District of Statistical Area J includes all waters west of 172° West longitude and south of 54° 36' North latitude (Figure 4).

Historic Background

Tanner crab, *Chionoecetes bairdi*, from the Western Aleutian District have generally been harvested incidental to Adak red king crab. Since the late 1970's, the harvest has ranged from a high of over 800,000 pounds in 1981/82 down to the catch in 1991/92 of less than 8,000 pounds (Table 21). During the 1993/94 and 1994/95 fishing seasons 8 and 10 vessels registered for the fishery, respectively. However, no deliveries were made.

1995/96 Fishery

The 1995 fishery opened concurrent with the red and brown king crab fisheries in the Adak king crab management Area R, on November 1. Only one vessel registered for Western Aleutian Tanner crab. This vessel also registered for red and brown king crab. As of February 22 no deliveries of Tanner crab have been made. The season remains open, however at this time there are no validly registered vessels fishing. The season will close by regulation on March 31, 1996.

Status of Stocks

No stock assessment surveys are conducted for *C. bairdi* Tanner crab in the Western Aleutian District, consequently no population estimates are available.

WESTERN ALEUTIAN *CHIONOECETES TANNERI*

Historic Background

The first reported landings of *Chionoecetes tanneri* Tanner crab from the Western Aleutian Islands Tanner crab Management Area occurred in the late 1970s incidental to the developing brown king crab fishery in the Adak king crab Management Area. Prior to 1993 no market existed for *C. tanneri* and few, if any, were sold commercially. No effort was recorded from the Western Aleutian District in 1993. Also in 1993, the department restricted the harvest to males five inches or greater in carapace width.

To collect biological information on *C. tanneri* crab the department implemented 100% observer coverage in 1994, as allowed by the permit provisions provided in 5 AAC 35.082. During that year six vessels registered to fish, however only two made deliveries. One vessel directed fishing effort for *C. tanneri* crab for a portion of the season, the other made deliveries only incidental to the Adak brown king crab fishery.

1995 Fishery

Catch records indicate a total of six vessels made 18 landings for a harvest of 145,795 pounds of *C. tanneri* in 1995. The average weight of crab retained in 1995 was 1.9 pounds, with an overall catch per unit effort (CPUE) of four crab per pot (Table 22).

Directed fishing effort for *C. tanneri* crab by three vessels occurred from April through June. The remaining effort was as bycatch in the Adak brown king crab fishery. Fishing effort in the directed fishery for *C. tanneri* was spread out over the Western Aleutian District from Amukta Pass to the Petrel Banks. Vessels fished an average of 498 pots and made 16,699 pot pulls during 1995. The average exvessel price for *C. tanneri* in 1995 was \$1.52 per pound for a total fishery value in excess of \$194,000 (Table 23).

Status of Stocks

No stock assessment surveys are conducted for *C. tanneri* Tanner crab, consequently no population estimates are available. Onboard observers have been required on all vessels targeting *C. tanneri* since 1994. This program has yielded information on size, sex and species composition of the non-retained catch necessary to manage these stocks.

Table 1. Historic Dutch Harbor, Area O, brown king crab catch, 1981/82-1995

Season	Number of			Harvest ^a	Pots Pulled	CPUE ^c	Percent Oldshell	Average		Deadloss ^b
	Vessels	Landings	Crab ^d					Weight ^e	Length ^d	
1981/82	6	16	22,666	115,715	2,906	8	3.8	5.1	158.1	8,752
1982/83	49	136	227,471	1,184,971	29,369	8	3.9	5.2	58.1	47,479
1983/84	47	132	328,353	1,810,973	29,595	11	NA	5.5	NA	45,268
1984 ^e	13	67	327,440	1,521,142	24,044	14	NA	4.6	161.2	70,362
1985	13	67	410,977	1,968,213	34,287	12	16.0	4.7	155.7	38,663
1986	17	71	400,389	1,869,180	37,585	11	-	4.7	NA	9,510
1987	22	77	299,734	1,383,198	43,017	7	25.0	4.6	149.6	24,210
1988 ^f	21	57	323,695	1,545,113	40,869	8	23.0	4.8	154.3	22,960
1989	13	70	424,067	1,852,249	43,345	10	30.0	4.4	150.9	17,421
1990	16	68	395,502	1,718,848	54,618	7	3.0	4.3	147.5	42,800
1991	11	50	335,647	1,447,732	40,604	8	4.0	4.3	147.9	45,100
1992	10	44	330,159	1,357,048	37,718	9	4.0	4.3	147.8	37,200
1993/94	4	14	217,788	915,460	22,490	10	1.1	4.2	149.1	7,324
1994	14	45	384,353	1,750,267	67,537	6	0.9	4.6	147.6	29,908
1995	17	42	431,867	1,993,980	65,030	6	5.2	4.6	149.6	14,676

^aDeadloss included.^bIn pounds.^cDefined as catch per pot pull.^dCarapace length in millimeters.^eSix inch permit season opened July 1.^fSeptember 1 established as season opening date.

Table 2. Historic Dutch Harbor brown king crab economic performance, 1981/82-1995.

Year	Total ^a	Number of		Number of Pots		Value		Season Length	
		Vessels	Landings	Registered	Pulled	Exvessel	Total ^b	Days	Dates
1981/82	0.1	6	16	-0- ^c	2,906	\$ 2.05	\$ 0.2	75	11/01-01/15
1982/83	1.1	49	136	-0- ^c	29,369	\$ 3.00	\$ 3.3	105	11/01-02/15
1983/84	1.8	47	132	4,514	29,595	\$ 3.05	\$ 5.5	105	11/01-02/15
1984/85	1.5	13	67	1,394	24,044	\$ 1.35	\$ 2.0	229	07/01-02/15
1985	1.9	13	67	1,479	34,287	\$ 2.00	\$ 3.8	121	07/01-10/31
1986	1.8	17	71	1,575	37,585	\$ 2.85	\$ 5.1	182	07/01-12/31
1987	1.4	22	77	3,591	43,017	\$ 2.85	\$ 4.0	62	07/01-09/02
1988	1.5	21	57	4,215	40,869	\$ 3.00	\$ 4.5	93	09/01-12/04
1989	1.8	13	70	5,635	43,345	\$ 3.50	\$ 6.3	104	09/01-12/15
1990	1.7	16	68	5,225	54,618	\$ 3.00	\$ 5.1	68	09/01-11/09
1991	1.4	11	50	3,760	40,604	\$ 2.00	\$ 2.8	74	09/01-11/15
1992	1.3	10	44	4,222	37,718	\$ 2.50	\$ 3.3	76	09/01-11/17
1993/94	.9	4	14	2,334	22,490	\$ 2.15	\$ 1.9	212	09/01-03/31
1994	1.8	14	45	7,378	67,537	\$ 4.00	\$ 6.9	57	09/01-10/28
1995	1.9	17	42	10,325	65,030	\$ 2.60	\$ 5.0	38	09/01-10/09

^a Millions of pounds, deadloss not included.

^b Millions of dollars.

^c Incidental catches to red king crab fishery.

Table 3. Dutch Harbor brown king crab catch by month, 1995.

Month	Number of			Harvest ^{a,b}	Pots Pulled	Average		Dead- loss ^b
	Vessels	Landings	Crab ^a			Weight ^c	CPUE ^c	
Sept.	16	28	380,079	1,607,730	49,858	4.6	7	51,246
Oct.	10	14	81,788	386,250	15,172	4.7	5	15,781
Season Total	17	42	431,867	1,993,980	65,030	4.6	6	67,02

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

Table 4. Dutch Harbor brown king crab by statistical area, 1995.

Stat Area	Number of		Harvest ^{a,b}	Pots Pulled	Average Weight ^b	CPUE ^c	Dead- loss ^b
	Landings	Crab ^r					
685303	5	2,390	12,024	772	5.0	3	54
685304	10	9,366	45,346	4,884	4.8	2	164
695232	8	28,010	128,272	4,502	4.6	6	2,089
695301	17	43,708	197,920	7,191	4.5	6	5,037
695302	6	10,722	49,747	1,714	4.6	6	847
705200	13	80,995	366,676	13,647	4.5	6	15,733
705232	25	177,837	825,660	19,394	4.6	9	29,330
705233	6	10,092	45,821	1,083	4.5	9	1,300
705300	13	53,267	245,633	8,026	4.6	7	6,790
Others	12	15,480	76,208	3,817	4.9	4	5,659
TOTAL	42	431,867	1,993,980	65,030	4.6	7	67,027

^aDeadloss included.

^bIn Pounds.

^cDefined as catch per pot pull.

Table 5. Dutch Harbor, Area O, historic red king crab catch, 1968/69-1994/95.

Season	Date		Number of			Harvest ^{a,b}	Pots	Average	CPUE ^c	Size ^d	Price/ Pound
	Opened	Closed	Vessels	Landings	Crab ^a		Pulled	Weight ^b			
1968/69	01/01 ^e	03/15	NA	NA	NA	11,300,000	NA	NA	NA	7.0	NA
1969/70	09/15	02/15	41	375	NA	8,950,000	72,683	NA	NA	7.0	NA
1970/71	09/15	01/10	32	268	NA	9,652,000	56,198	NA	NA	7.0	NA
1971/72	09/15	10/23	32	210	1,447,692	9,391,615	31,531	6.5	46	6.5	NA
1973/74	11/01	11/24	56	290	1,780,673	12,722,696	41,840	7.1	43	6.5	\$0.65
1974/75	11/01	01/14	87	372	1,812,647	13,991,129	71,821	7.7	25	6.5	\$0.37
1975/76	11/01	01/10	79	369	2,147,350	15,906,666	86,874	7.4	25	6.5	\$0.42
1976/77	11/01	12/07	72	226	1,273,298	9,367,965	65,796	7.4	10	6.5	\$0.64
		12/13	01/13	38	61	86,619	830,458	17,298	9.6	5	8.0
1977/78	09/15	12/08	33	227	539,656	3,658,860	46,617	6.8	12	6.5	\$0.99
		12/08	01/05	6	7	3,096	25,557	812	8.3	4	7.5
1978/79	09/10	11/20	60	300	1,233,758	6,824,793	51,783	5.5	24	6.5	\$1.35
1979/80	09/10	01/10	104	542	2,551,116	15,010,874	120,554	5.9	21	6.5	\$0.90
1980/81	11/01	01/12	114	830	2,772,287	17,660,642	231,607	6.4	12	6.5	\$1.02
		01/15	02/15	54	120	182,349	1,392,923	30,000	7.6	6	7.5
1981/82	11/01	02/15	92	683	741,966	5,155,345	220,087	6.9	3	6.5	\$2.30
1982/83	11/01	01/15	81	278	64,380	431,179	72,924	6.7	1	6.5	\$3.43
1983/84	through 1995/96					F I S H E R Y C L O S E D					

^aIncludes deadloss^bIn pounds.^cDefined as catch per pot pull.^dMinimum legal size in inches.^ePrior to 1968/69 fishery was open 12 months/year. 1968/69 season ran 1-1-68 to 3-15-69.

Table 6. Adak, Area R, historic brown king crab catch statistics, 1975/76-1995/96.

Season	Number of			Harvest ^{a,b}	Pots Pulled	Average Weight ^b	CPUE ^c	Deadloss ^b
	Vessels	Landings	Crab ^a					
1975/76				C O N F I D E N T I A L				
1976/77				C O N F I D E N T I A L				
1977/78				C O N F I D E N T I A L				
1978/79			N O	R E P O R T E D C A T C H				
1979/80				C O N F I D E N T I A L				
1980/81	4	4	11,523	58,914	700	5.1	17	5,000
1981/82	14	76	217,700	1,194,046	24,627	5.5	9	22,064
1982/83	99	501	1,509,001	8,006,274	150,103	5.3	10	220,743
1983/84	157	1,002	1,534,909	8,128,029	226,798	5.3	7	171,021
1984/85	38	85	643,597	3,180,095	64,777	4.9	10	125,073
1985/86 ^d	49	386	2,052,048	11,124,759	202,401	4.5	12	5,304
1986/87	62	525	2,923,947	12,798,004	392,185	4.4	7	276,736
1987/88	46	386	1,908,989	8,001,177	267,705	4.2	7	165,415
1988/89	74	455	2,165,508	9,080,196	280,732	4.2	8	122,251
1989/90	64	505	2,520,786	10,162,400	324,153	4.0	8	100,724
1990/91 ^e	13	167	1,312,116	5,250,687	160,960	4.0	8	176,583
1991/92	16	206	1,511,751	6,254,409	192,949	4.1	8	96,848
1992/93	18	130	1,198,169	4,916,149	165,503	4.1	7	104,215
1993/94	21	147	1,393,742	4,635,683	212,164	4.2	6	165,358
1994/95	34	247	1,539,866	6,378,030	319,006	4.1	5	242,065
1995/96 ^f	14	34	271,022	1,130,035	46,174	4.2	6	69,557

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

^dSize limit reduced from 6.5 to 6 inches.

^ePartial closure August 7.

^fPreliminary data, fishery ongoing.

Table 7. Adak brown king crab harvest composition by fishing seasons, 1975/76-1995/96.

Season	Season		Harvest ^{a,b}	Percent New Shell	Average Length ^c	Minimum Size ^d
	Opened	Closed				
1975/76	11/01	12/18	CONFIDENTIAL	NA	NA	6.5
1976/77	01/07	04/15	CONFIDENTIAL	NA	NA	6.5
1977/78	02/20	03/20	CONFIDENTIAL	NA	NA	6.5
1978/79	02/21	10/01	0	NA	NA	6.5
1979/80	01/15	04/01	CONFIDENTIAL	NA	NA	6.5
1980/81	01/15	03/28	58,914	97.6	158.4	6.5
1981/82	11/01	06/15	1,194,046	90.5	159.6	6.5
1982/83	11/01	04/15	8,006,274	92.4	158.2	6.5
1983/84	11/10	04/15	8,128,029	87.8	NA	6.5
1984/85	11/10	07/08	3,180,095	87.5	156.7	6.5
1985/86	11/01	08/15	11,124,759	86.3	151.3	6.0
1986/87	11/01	08/15	12,798,004	69.1	149.5	6.0
1987/88	11/01	08/15	8,001,177	91.7	146.9	6.0
1988/89	11/01	08/15	9,080,196	91.2	149.1	6.0
1989/90	11/01	08/15	10,162,400	95.3	148.5	6.0
1990/91 ^e	11/01	08/15	5,250,687	91.5	144.5	6.0
1991/92	11/01	08/15	6,254,409	94.4	144.7	6.0
1992/93	11/01	08/15	4,916,149	93.5	147.0	6.0
1993/94	11/01	08/15	4,635,683	95.4	147.8	6.0
1994/95	11/01	08/15	6,378,030	92.9	149.5	6.0
1995/96 ^d	11/01	-	1,130,035	NA	NA	6.0

^aDeadloss included.

^bIn pounds.

^cCarapace length (millimeters)

^dCarapace width (inches)

^ePartial closure August 7.

^dPreliminary data, fishery ongoing

Table 8. Historic Adak brown king crab economic performance, 1980/81-1995/96.

Year	Season	Number of			Number of Pots		Value		Season Length	
	Total ^a	Vessels ^b	CP's	Landings	Registered	Pulled	Exvessel	Total ^d	Days	Dates
1980/81	0.05	4	N/A	4	581	700	\$ 0.90	\$ 0.05	(72)	01/15-3/28
1981/82	1.2	14	N/A	76	2,647	24,627	\$ 2.06	\$ 2.5	(227)	11/01-6/15
1982/83	7.8	99	N/A	501	13,111	150,103	\$ 3.01	\$23.5	(166)	11/01-4/15
1983/84	8.0	157	N/A	1,002	17,406	226,798	\$ 2.92	\$23.4	(157)	11/10-4/15
1984/85	3.1	38	N/A	85	5,270	64,777	\$ 2.00	\$ 6.2	(240)	11/10-7/08
1985/86	11.1	49	N/A	386	7,057	202,401	\$ 2.50	\$27.8	(288)	11/01-8/15
1986/87	12.5	62	N/A	325	12,958	392,185	\$ 3.00	\$37.5	(288)	11/01-8/15
1987/88	7.8	46	N/A	386	10,687	267,705	\$ 3.00	\$23.4	(289)	11/01-8/15
1988/89	9.0	74	13	455	23,627	280,732	\$ 3.20	\$28.8	(288)	11/01-8/15
1989/90	10.1	64	15	505	14,724	324,153	\$ 3.00	\$30.3	(288)	11/01-8/15
1990/91	5.3	13	6	167	7,380	160,960	\$ 3.00	\$15.9	(288)	11/01-8/15
1991/92	6.1	16	7	206	7,635 ^e	192,949	\$ 2.50	\$15.2	(289)	11/01-8/15
1992/93	4.9	18	4	130	8,236 ^e	165,503	\$ 2.05	\$10.1	(288)	11/01-8/15
1993/94	4.6	21	1	147	11,970	212,164	\$ 2.50	\$11.2	(288)	11/01-8/15
1994/95	6.1	34	2	247	15,604	319,006	\$ 3.33	\$20.3	(288)	11/01-8/15
1995/96 ^f	1.1	14	1	36	8,060	46,174	\$ 1.98	\$ 2.2		11/01-Present

^aMillions of pounds, deadloss not included.^bIncludes catcher-processors.^cNo separate registration from red king crab.^dMillions of dollars.^eGear directed fishing on brown king crab.^fPreliminary data, fishery ongoing.

Table 9. Adak brown king crab catch by statistical area, 1994/95.

Area	Number of		Harvest ^{ab}	Pots Pulled	Average Weight	CPUE ^c	Dead- loss ^b
	Landings	Crab ^a					
715130	4	25,363	97,712	2,328	3.8	11	3,347
715201	3	7,148	27,139	940	3.8	8	950
715202	30	143,269	573,124	17,192	4.0	8	32,162
715231	34	182,894	724,930	23,341	4.0	8	24,754
715232	8	27,522	111,462	5,240	4.0	5	11,381
725130	4	13,331	62,848	2,256	4.7	6	971
725201	27	123,022	507,346	20,046	4.1	6	19,871
725203	6	24,435	106,477	7,700	4.4	3	206
725230	19	115,912	454,620	21,324	4.0	5	14,554
735201	9	19,569	79,416	4,962	4.0	4	4,717
735230	15	39,224	155,391	11,459	4.0	3	5,902
745131	8	16,072	77,186	5,531	4.8	3	2,739
745206	3	3,751	16,282	588	4.3	6	517
765100	3	13,143	57,672	2,898	4.4	5	440
765203	3	1,160	5,184	273	4.5	4	27
775131	4	1,335	5,406	1,566	4.1	1	355
775133	5	6,961	30,754	1,507	4.4	5	1,155
775134	3	3,106	13,581	622	4.4	5	849
775135	6	5,223	22,164	1,477	4.2	4	1,012
775136	4	3,591	15,117	637	4.2	6	914
785101	3	3,046	12,542	545	4.1	6	156
785102	16	17,179	70,633	5,165	4.0	3	760
785103	7	7,549	33,083	1,465	4.4	5	1,064
785131	24	44,089	192,724	19,587	4.4	2	14,616
785135	13	15,110	64,275	2,999	4.3	5	1,727
795101	3	3,108	12,827	502	4.1	6	728
795102	9	7,797	31,167	2,492	4.0	3	2,786
795131	8	7,959	33,776	1,925	4.0	4	728
795132	16	57,792	234,078	8,933	4.0	7	11,327
795200	28	17,395	76,216	4,106	4.0	4	380
795230	15	9,967	43,428	2,019	4.3	5	212
805103	25	18,111	76,099	2,080	4.2	9	938

(Continued)

Table 9. (Page 2 of 2)

Stat. Area	Number of		Harvest ^{a, b}	Pots Pulled	Average Weight	CPUE ^c	Dead- loss ^b
	Landings	Crab ^a					
805131	8	5,069	20,701	377	4.1	13	133
805132	29	74,930	313,901	8,363	4.0	9	721
805201	32	30,312	126,562	4,664	4.0	7	6,152
805400	6	18,918	72,747	6,906	4.0	3	4,930
815100	11	4,631	19,566	621	4.0	8	29
815131	20	19,133	78,710	2,270	4.1	8	41
825132	10	5,149	24,925	2,525	4.8	2	667
825201	15	24,634	114,405	6,389	4.6	4	2,291
825202	4	5,873	26,107	1,381	4.5	4	1,600
835130	15	16,101	74,377	5,655	4.6	3	1,911
835200	28	64,385	299,460	19,699	4.7	3	13,842
845130	13	21,331	93,320	7,531	4.4	3	13,788
845202	25	65,083	271,780	19,410	4.2	3	11,248
855200	13	40,578	162,503	11,484	4.0	4	5,954
855231	4	18,938	68,709	3,376	4.0	6	3,452
865203	7	16,099	62,434	2,560	3.9	6	2,513
865231	3	8,568	33,928	1,114	4.0	8	804
875232	5	23,964	109,518	8,102	5.0	3	2,781
Others ^d	39	65,752	280,059	15,302	4.3	4	9,499
TOTAL	247	1,539,866	6,378,030	319,006	4.1	5	242,065

^aDeadloss included.^bIn Pounds.^cDefined as catch per pot pull..^d28 statistical areas

Table 10. Adak brown king crab catch statistics by month, 1994/95.

Month	Number of		Crab	Harvest ^{a, b}	Pots Pulled	Average Weight ^b	CPUE ^c	Dead-loss ^b
	Vessels	Landings						
Nov	19	24	101,434	440,611	21,811	4.3	4.5	16,575
Dec	17	28	170,463	719,877	28,692	4.2	5.5	48,329
Jan	9	15	105,248	424,267	15,077	4.0	7.0	4,330
Feb	5	8	67,158	291,542	11,378	4.3	5.5	48,329
Mar	9	11	83,571	339,387	13,555	4.0	6.0	13,267
Apr	18	31	170,332	709,260	49,298	4.2	3.5	17,979
May	23	41	261,873	1,066,258	51,270	4.1	4.9	43,197
Jun	20	31	214,877	878,772	44,342	4.1	4.8	30,290
Jul	18	37	242,615	997,643	54,066	4.1	4.4	33,607
Aug	15	21	122,359	510,413	29,717	4.2	4.0	15,791
TOTAL	34	247	1,539,866	6,378,038	319,006	4.1	4.7	242,065

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

Table 11. Adak brown king crab catch by statistical area, 1995/96.

Stat Area	Number of		Harvest ^{a, b}	Pots Pulled	Average Weight	CPUE ^c	Dead- loss ^b
	Landings	Crab ^a					
715202	8	55,623	232,193	6,134	4.2	9	10,417
715231	8	36,175	143,517	4,433	4.0	8	5,553
715232	3	19,628	84,365	4,683	4.3	4	6,267
725201	6	47,163	194,216	5,136	4.1	9	13,865
725203	3	10,007	42,652	1,025	4.6	10	3,565
725230	5	2,166	9,374	691	4.3	3	502
735201	3	3,263	15,851	1,651	4.9	2	305
735230	4	1,677	7,123	854	4.3	2	293
745131	3	281	1,155	182	4.1	2	81
745206	3	306	1,507	212	4.9	1	48
775131	3	634	3,022	307	4.8	2	264
785102	4	2,082	8,839	645	4.3	3	1,723
785131	8	4,616	19,922	1,065	4.3	4	3,706
785135	5	8,162	33,243	651	4.1	13	498
795200	6	4,604	19,076	393	4.1	12	91
805132	7	21,734	89,983	2,548	4.1	9	291
805201	7	4,222	17,452	478	4.1	9	0
815131	6	8,433	34,189	404	4.1	21	265
815132	6	7,061	28,957	354	4.1	20	0
835200	3	1,212	5,372	867	4.1	1	1,440
845202	3	7,017	30,054	2,387	4.3	3	6,580
875232	3	5,648	26,300	2,430	4.7	2	3,475
Others	34	35,414	151,230	8,644	4.2	4	10,328
Total	36	287,128	1,199,592	46,174	4.2	6	69,557

^aDeadloss included.

^bIn Pounds.

^cDefined as catch per pot pull.

Table 12. Adak brown king crab catch statistics by month^d, 1995/96.

Month	Number of		Crab	Harvest ^{a, b}	Pots Pulled	Average Weight ^b	CPUE ^c	Dead- loss ^b
	Vessels	Landings						
Nov	11	19	148,694	624,184	28,427	4.2	5.3	44,650
Dec	8	12	78,313	323,495	12,393	4.1	6.4	16,491
Jan	4	5	44,015	182,356	5,354	4.1	8.2	8,416
TOTAL	14	36	271,022	1,130,035	16,106	4.2	5.9	69,557

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

^dFishery in progress. Figures as of January 15, 1996.

Table 13. Adak, Area R, historic red king crab catch statistics, 1960/61-1995/96.

Season	Number of		Crab ^a	Harvest ^{a,b}	Pots		Percent Recruits	Average		Dead- loss ^b
	Vessels	Landings			Pulled	CPUE ^c		Weight ^b	Length ^d	
1960/61	4	41	NA	2,074,000	NA	9	NA	NA	NA	NA
1961/62	8	218	NA	6,114,000	NA	NA	NA	NA	NA	NA
1962/63	9	248	NA	8,006,000	NA	NA	NA	NA	NA	NA
1963/64	11	527	NA	17,904,00	NA	NA	NA	NA	NA	NA
1964/65	18	442	NA	21,193,00	NA	NA	NA	NA	NA	NA
1965/66	10	431	NA	12,915,00	NA	NA	NA	NA	NA	NA
1966/67	10	90	NA	5,883,000	NA	NA	NA	NA	NA	NA
1967/68	22	505	NA	14,131,00	NA	NA	NA	NA	NA	NA
1968/69	30		NA	16,100,00	NA	NA	NA	NA	NA	NA
1969/70	33	435	NA	18,016,00	115,929	NA	NA	6.5	NA	NA
1970/71	35	378	NA	16,057,00	124,235	NA	NA	NA	NA	NA
1971/72	40	166	NA	15,475,94	46,011	NA	NA	NA	NA	NA
1972/73	43	313	3,461,025	18,724,14	81,133	43	50.9	5.4	NA	NA
1973/74	41	239	1,844,974	9,741,464	70,059	26	48.5	5.3	148.6	NA
1974/75	36	97	532,298	2,774,963	32,620	16	48.6	5.2	148.6	NA
1975/76	20	25	79,977	411,583	8,331	10	67.5	5.2	147.2	NA
1976/77					C l o s e d					
1977/78	12	18	160,343	905,527	7,269	22	43.9	5.7	152.2	NA
1978/79	13	27	149,491	807,195	13,948	11	56.7	5.4	NA	1,170
1979/80	18	23	82,250	467,229	9,757	8	42.8	5.7	152.0	24,850
1980/81	17	52	254,390	1,419,513	20,914	12	65.2	5.6	149.0	54,360
1981/82	46	106	291,311	1,648,926	40,697	7	55.5	5.7	148.3	8,759

-Continued-

Table 13. (page 2 of 2)

Season	Number of		Crab ^a	Harvest ^{a, b}	Pots Pulled	CPUE ^c	Percent Recruits	Average		Dead- loss ^b
	Vessels	Landings						Weight ^b	Length ^d	
1982/83	72	191	284,787	1,701,818	66,893	4	49.9	6.0	150.8	7,855
1983/84	106	248	298,948	1,981,579	60,840	5	30.4	6.6	157.3	3,833
1984/85	64	113	206,751	1,367,672	50,685	4	31.4	6.6	155.1	0
1985/86	35	89	162,271	906,293	32,478	5	40.0	5.6	152.2	6,120
1986/87	33	69	126,146	712,243	29,189	4	NA	5.6	NA	500
1987/88	71	109	211,712	1,213,933	43,433	5	65.3	5.7	148.5	6,900
1988/89	73	156	266,053	1,567,314	64,374	4	39.0	5.9	153.1	557
1989/90	56	123	196,070	1,118,566	54,513	4	NA	5.7	NA	759
1990/91	7	34	146,903	828,105	10,674	14	NA	5.6	NA	0
1991/92	10	35	165,356	951,278	16,636	10	NA	5.7	NA	0
1992/93	12	30	218,049	1,286,424	16,129	13	NA	6.0	NA	5,000
1993/94	12	21	119,330	698,077	13,575	9	NA	5.8	NA	7,402
1994/95	20	31	30,337	196,967	18,146	2	NA	6.5	NA	1,430
1995/96	4	12	6,880	38,941	2,205	3	NA	7.1	NA	213

^aIncludes deadloss.^bIn pounds.^cDefined as catch per pot pull.^dCarapace length in millimeters.

Table 14. Historic Adak red king crab economic performance, 1980/81-1995/96

Year	Season	Number of		Landings	Number of Pots		Value		Season Length	
	Total ^a	Vessels ^b	CP'S		Registered	Pulled	Exvessel	Total ^c	Days	Dates
1980/81	1.4	17	N/A	52	2,471	20,914	\$ 0.92	\$ 1.3	72	01/15-03/28
1981/82	1.6	46	N/A	106	8,698	40,697	\$ 2.01	\$ 3.2	107	11/01-02/15
1982/83	1.7	72	N/A	191	13,111	66,893	\$ 3.44	\$ 5.9	76	11/01-01/15
1983/84	2.0	106	N/A	248	19,407	60,840	\$ 3.43	\$ 6.9	340	01/10-12/16
1984/85	1.4	64	N/A	113	8,876	50,685	\$ 2.10	\$ 2.9	97	11/10-02/15
1985/86	.9	35	N/A	89	8,274	32,478	\$ 2.15	\$ 1.9	107	11/01-02/15
1986/87	.7	33	N/A	69	12,958	29,189	\$ 3.85	\$ 2.7	107	11/01-02/15
1987/88	1.2	71	N/A	109	17,720	43,433	\$ 4.00	\$ 4.8	107	11/01-02/15
1988/89	1.6	73	11	156	23,927	64,374	\$ 5.00	\$ 8.0	34	11/01-12/04
1989/90	1.1	56	10	123	19,363	54,513	\$ 4.20	\$ 4.6	107	11/01-02/15
1990/91	.7	7	4	34	8,500	10,674	\$ 4.00	\$ 2.8	107	11/01-02/15
1991/92	.9	10	3	35	2,305	16,636	\$ 3.00	\$ 2.9	107	11/01-02/15
1992/93	1.3	12	2	30	2,716 ^d	16,129	\$ 5.05	\$ 6.5	76	11/01-01/15
1993/94	.7	12	1	21	3,948 ^d	13,575	\$ 3.87	\$ 2.7	107	11/01-02/15
1994/95	.2	20	2	31	4,065 ^d	18,146	\$ 5.50	\$ 1.1	27	11/01-11/28
1995/96	°	4	1	12	606	2,205	\$ 2.70	\$ 0.1	107	11/01-02/15

^aMillions of pounds.^bIncludes catcher-processors.^cMillions of dollars.^dIncludes gear of vessels landing both red and brown king crab.^e38,941 pounds.

Table 15 Adak red king crab catch statistics by month, 1994/95.

Month	Number of Crab			Harvest ^{a,b}	Pots Pulled	Average Weight ^b	CPUE ^c	Dead-loss ^b
	Vessels	Landings	Crab ^a					
Nov	20	31	30,337	196,967	18,146	6.5	2	1,430
Total	20	31	30,337	196,967	18,146	6.5	2	1,430

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

Table 16. Adak red king crab catch statistics by month, 1995/96.

Month	Number of		Crab ^a	Harvest ^{a, b}	Pots Pulled	Average Weight ^b	CPUE ^c	Dead- loss ^b
	Vessels	Landings						
Nov	4	7	5,610	30,395	1,488	5.4	5	235
Dec	C O N F I D E N T I A L							
Jan	C O N F I D E N T I A L							
Total	4	12	6,880	38,941	2,205	5.7	3	235

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

Table 17. Adak red king crab catch by statistical area, 1995/96.

Stat Area	Number of		Harvest ^{a, b}	Pots Pulled	Average Weight ^b	CPUE ^c	Dead- loss ^b
	Landings	Crab ^a					
795200	6	261	1,802	217	6.9	1	0
805131	3	461	2,766	58	6.0	8	0
805132	7	758	4,584	138	6.1	6	35
805201	7	1,570	10,413	519	6.6	3	0
Other	15	3,830	19,376	1,054	5.7	4	200
Total	12	6,880	38,941	2,205	5.7	3	235

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

Table 18. Eastern Aleutian District historic *Chionoecetes bairdi* fishery statistics^a, 1973/74-1995.

Season	Date		Vessels	Number of		Harvest ^{b,c}	Pots Pulled	Average Weight ^c	CPUE ^d	Price per Pound
	Opened	Closed		Landings	Crab ^b					
1973/74	10/01	7/31	6	14	210,539	498,836	NR ^e	2.4	60	\$.NR ^e
1974/75	01/18	10/15			C o n f i d e n t i a l					
1975/76	01/20	10/15	8	13	219,166	534,295	4,646	2.4	47	\$0.20
1976/77	11/07	6/15	12	35	544,755	1,239,569	9,640	2.3	57	\$0.30
1977/78	11/01	6/15	15	198	1,104,631	2,494,631	29,855	2.3	37	\$0.38
1978/79	11/01	6/15	20	174	542,081	1,280,115	18,618	2.4	20	\$0.52
1979/80	11/01	6/15	18	107	352,819	886,487	18,040	2.4	20	\$0.52
1981	01/15	6/15	29	119	264,238	654,514	21,771	2.4	12	\$0.58
1982	02/15	6/15	31	138	332,260	739,694	30,109	2.2	11	\$1.25
1983	02/15	6/15	23	107	250,774	547,830	22,168	2.1	11	\$1.20
1984	02/15	6/15	16	91	104,761	239,585	11,069	2.3	9	\$0.98
1985	01/15	6/15	6	56	71,918	165,529	5,620	2.3	13	\$1.30
1986	01/15	6/15	9	37	73,187	167,339	10,244	2.3	7	\$1.50
1987	01/15	6/15	7	63	71,338	160,292	5,294	2.2	13	\$2.00
1988	01/15	4/10	19	130	129,468	309,918	11,011	2.4	12	\$2.10
1989	01/15	5/07	12	109	144,746	326,396	14,685	2.2	10	\$2.90
1990	01/15	4/09	10	75	73,269	171,785	6,858	2.3	11	\$1.85
1991	01/15	3/31	5	27	21,511	50,038	1,849	2.3	12	\$1.25
1992	01/15	3/31	6	29	42,096	98,703	2,963	2.3	14	\$1.75
1993	01/15	3/31	7	34	51,441	118,609	3,530	2.3	15	\$1.70
1994	01/15	3/31	8	120	71,962	166,545	6,323	2.3	11	\$2.35
1995					N O C O M M E R C I A L F I S H E R Y					

^a5½ inch minimum carapace width.^bDeadloss included beginning 1980.^cIn pounds.^dDefined as catch per pot pull.^eNo Record.

Table 19. Eastern Aleutian *Chionoecetes tanneri* Tanner crab catch, 1993-1995.

Year	Number of			Harvest ^{a, b}	Pots	Average	CPUE ^c	Dead- loss ^b
	Vessels	Landings	Crab ^a		Lifted	Weight ^b		
1993	C O N F I D E N T I A L							
1994	3	27	426,230	759,239	38,106	1.8	11	19,474
1995	7	51	494,522	850,427	75,259	1.7	6	28,338

^aDeadloss included.

^bIn pounds.

^cDefined as catch per pot pull.

Table 20. Eastern Aleutian *C. tanneri* Tanner crab economic performance, 1993-1995.

Year	Season	Number of		Number of Pots		Value		Season Length	
	Total ^a	Vessels	Landings	Registered	Pulled	Exvessel	Total ^b	Days	Dates
1993				CONFIDENTIAL					
1994	739,765	3	27	1770	38,106	\$1.20	\$.9	365	01/1-12/31
1995	822,089	7	51	NA	75,259	\$1.57	\$1.3	365	01/1-12/31

^aDeadloss not included.

^bMillions of dollars.

Table 21. Western Aleutians District historic *C. bairdi* Tanner crab catch statistics, 1973/74-1995/96.

Year	Date		Number of		Crab ^a	Harvest ^{a,b}	Pots Pulled	Average Weight ^b	CPUE ^c	Size ^d	Price/ Pound
	Opened	Closed	Vessels	Landings							
1973/74	11/01	10/15	7	12	31,079	71,887	2,390	2.3	13	-	N/A
1974/75	11/01	10/15			C o n f i d e n t i a l						
1975/76	11/01	10/15			C o n f i d e n t i a l						
1976/77	11/01	10/15			C o n f i d e n t i a l						
1977/78	11/01	06/15	6	7	103,190	237,512	2,700	2.3	38	5.5	\$ 0.38
1978/79	11/01	06/15	6	9	84,129	197,244	4,730	2.3	18	5.5	\$ 0.53
1979/80	11/01	06/15	10	12	147,843	337,297	5,952	2.3	25	5.5	\$ 0.52
1980/81	01/15	06/15	9	23	95,102	220,716	7,327	2.3	13	5.5	\$ 0.54
1981/82	01/15	06/15	17	43	364,164	838,697	21,910	2.3	17	5.5	\$ 1.30
1982/83	11/01	06/15	61	125	225,491	488,399	40,450	2.2	6	5.5	\$ 1.27
1983/84	11/10	06/15	31	86	171,576	384,146	20,739	2.2	8	5.5	\$ 0.95
1984/85	11/10	06/15	31	41	75,009	163,460	13,416	2.2	6	5.5	\$ 1.30
1985/86	11/01	06/15	15	30	98,089	206,814	7,999	2.1	12	5.5	\$ 1.40
1986/87	11/01	06/15	8	24	19,874	42,761	10,878	2.1	2	5.5	\$ 1.50
1987/88	11/01	04/20	15	37	63,545	141,390	7,453	2.2	8	5.5	\$ 2.10
1988/89	11/01	05/07	36	77	69,280	148,997	18,906	2.1	4	5.5	\$ 1.00
1989/90	11/01	04/09	12	30	22,937	48,746	6,204	2.1	4	5.5	\$ 1.00
1990/91	11/01	03/25	5	21	6,901	14,779	1,309	2.1	5	5.5	\$ 1.25
1991/92	11/01	03/31	8	8	3,483	7,825	986	2.2	4	5.5	\$ 1.00
1992/93	11/01	03/31			C o n f i d e n t i a l						
1993/94	11/01	03/31			N O R E P O R T E D C A T C H						
1994/95	11/01	03/31			N O R E P O R T E D C A T C H						
1995/96 ^e	11/01	03/31			N O R E P O R T E D C A T C H						

^aDeadloss included

^bIn pounds.

^cDefined as catch per pot pull.

^dMinimum carapace width in inches.

^eFishery in progress.

Table 22. Western Aleutian *C. tanneri* Tanner crab catch, 1993-1995.

Year	Number of			Harvest ^{1, b}	Pots	Average	CPUE ^c	Deadloss ^b
	Vessels	Landings	Crab ^a		Lifted	Weight ^b		
1993			NO REPORTED CATCH					
1994			CONFIDENTIAL					
1995	6	16	76,339	144,721	16,699	1.9	4	16,964

^aDeadloss included.

^bIn pounds.

^cDefined as catch per unit effort.

Table 23. Western Aleutian *C. tanneri* Tanner crab economic performance, 1993-1995.

Year	Season	Number of		Number of Pots		Value		Season Length	
	Total ^a	Vessels	Landings	Registered	Pulled	Exvessel	Total ^b	Day	Dates
1993				N O R E P O R T E D C A T C H					
1994				C O N F I D E N T I A L					
1995	127,757	6	16	NA	16,699	\$1.52	\$0.2	365	01/1-12/31

^aDeadloss not included.

^bMillions of dollars.

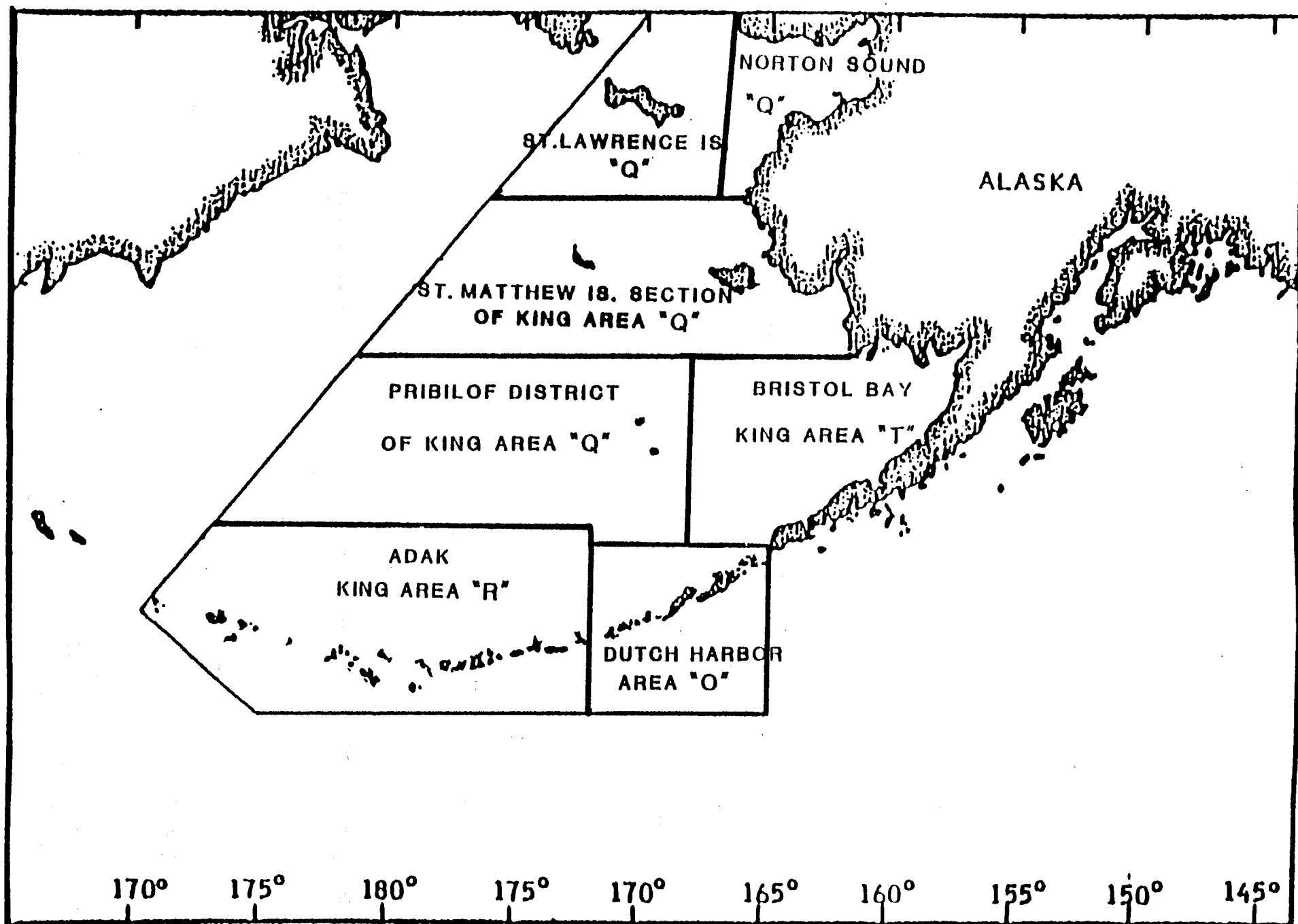


Figure 1. King Crab Management Areas, O Dutch Harbor and R Adak.

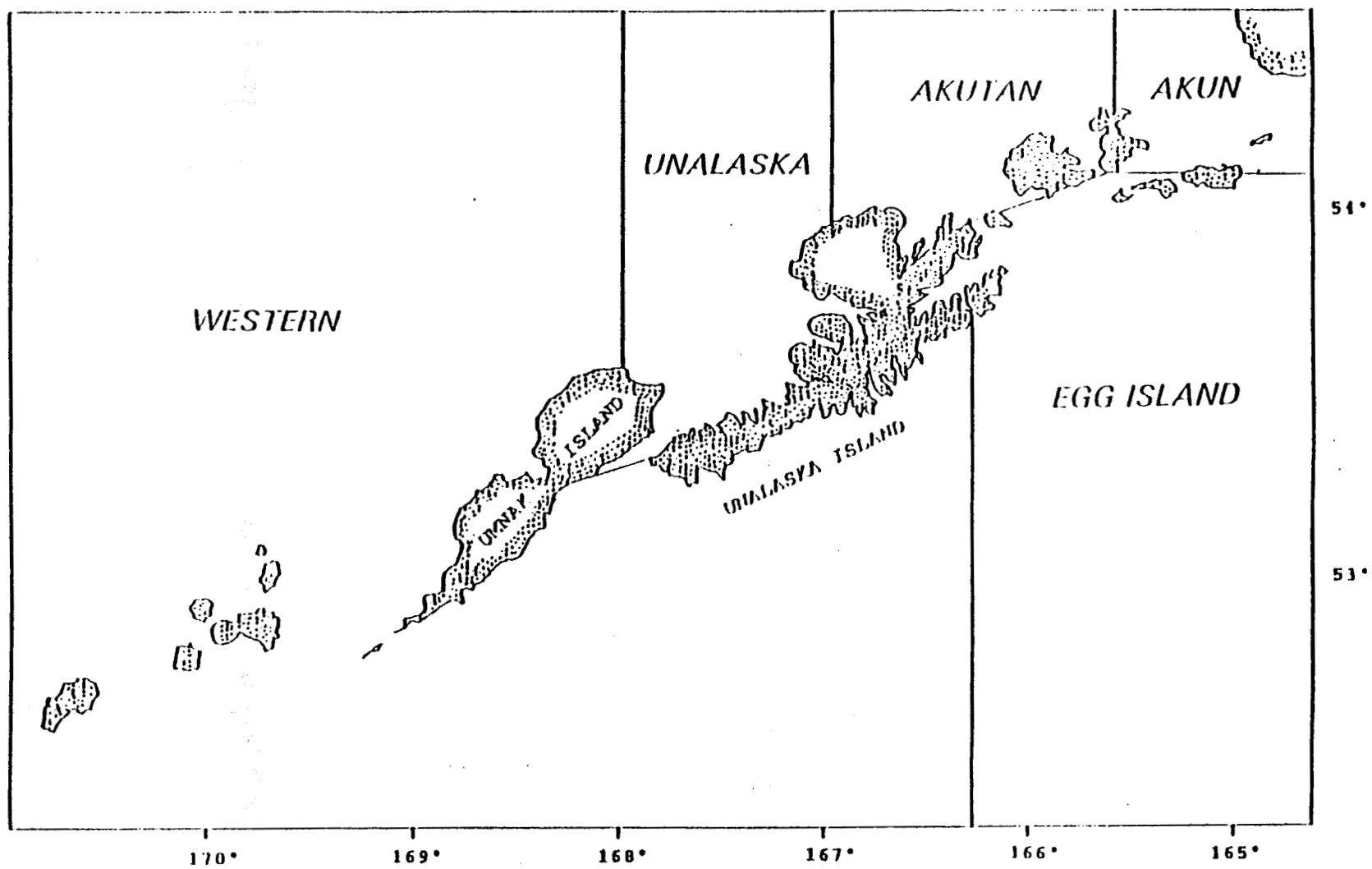


Figure 2. Dutch Harbor, Area 0, King crab districts.

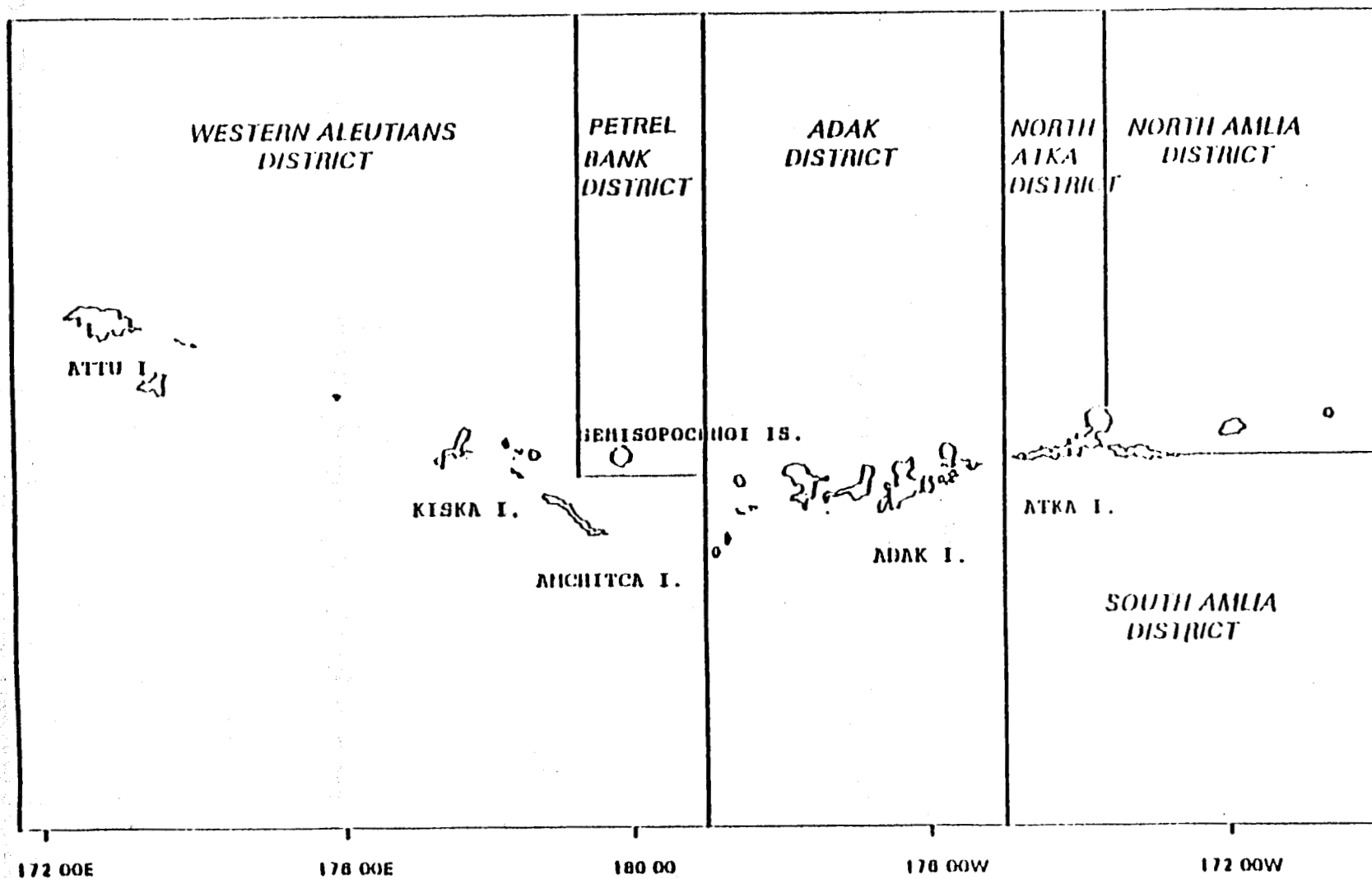


Figure 3. Adak, Area R, king crab districts.

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